CLAIMS

What is claimed is:

1. An image processing method for providing interpolation processing of pixel data in accordance with an enumerated value of a counter counting a reference clock in a unit which is composed of a prescribed number of pixel data, comprising the steps of:

keeping a final enumerated value of the counter for a former unit instead of resetting it; and,

carrying out a counting processing at a beginning of a current unit with a consecutive enumerated value from the kept final enumerated value.

2. The image processing method as in claim 1, wherein one unit corresponds to the pixel data in one scanning line.

3. The image processing method as in claim 1 further including the steps of:

storing the pixel data in a memory in synchronization with a write clock;

reading out the pixel data from the memory in synchronization with a read clock; and

interpolating the pixel data by generating the read clock through thinning out the write clock in accordance with the enumerated value of the counter.

4. The image processing method as in claim 3, wherein one or more prescribed number of clocks are thinned out from the write clocks in accordance with a value set in a register.

5. An image processing method for thinning out pixel data according to an enumerated value of a counter which counts a reference clock at every one unit that is composed of a prescribed number of pixel data, comprising the steps of:

keeping a final enumerated value of the counter for a former unit instead of resetting it; and,

carrying out a counting processing at a beginning of a current unit with a consecutive enumerated value from the kept final enumerated value.

6. The image processing method as in claim 5, wherein one unit corresponds to the pixel data in one scanning line.

7. The image processing method as in claim 5 further including the steps of:

storing the pixel data in a memory in synchronization with a write clock;

reading out the pixel data from the memory in synchronization with a read clock; and

thinning out the pixel data by generating the write clock through thinning out the read clock in accordance with the enumerated value of the counter.

8. The image processing method of claim 7, wherein one or more specified clocks are thinned out from the read clock in accordance with a value set in a register.

9. An image processing method for interpolating pixel data according to an enumerated value of a counter which counts a reference clock in every one unit that is composed of a prescribed number of pixel data, comprising the steps of:

not resetting a final enumerated value of the counter for a former unit at a beginning of counting for a current unit if the pixel data are pseudo gray-scale; and

resetting the final enumerated value of the counter for the former unit at the beginning of the current unit if the pixel data are bi-level.

10. The image processing method as in claim 9, wherein one unit corresponds to the pixel data in one scanning line.

11. The image processing method as in claim 9 further including the steps of:

storing the pixel data in a memory in synchronization with a write clock;

reading out the pixel data from the memory in synchronization with a read clock; and

interpolating the pixel data by generating the read clock through thinning out the write clock in accordance with the enumerated value of the counter.

12. The image processing method as in claim 11, wherein one or more specified clocks are thinned out from the write clock in accordance with a value set in a register.

13. An image processing method for thinning out pixel data according to an enumerated value of a counter which counts a reference clock at every one unit that is composed of a prescribed number of pixel data, comprising the steps of:

not resetting a final enumerated value of the counter for a former unit at a beginning of a current unit if the pixel data are pseudo gray-scale; and

resetting the final enumerated value of the counter for the former unit at the beginning of the current unit if the pixel data are bi-level.

14. The image processing method as in claim 13, wherein one unit corresponds to the pixel data in one scanning line.

15. The image processing method as in claim 13 further including the steps of:

storing the pixel data in a memory in synchronization with a write clock;

reading out the pixel data from the memory in synchronization with a read clock; and

thinning out the pixel data by generating the write clock through thinning out the read clock in accordance with the enumerated value of the counter.

16. The image processing method as in claim 15, wherein one or more specified clocks are thinned out from the read clock in accordance with a value set in a register.

17. An image processing apparatus for providing interpolation processing with one unit which is composed with a prescribed number of pixel data to be inputted, comprising:

a memory for storing inputted pixel data;

a counter for counting a reference clock;

a clock thin-out circuit for generating a read clock by thinning out a write clock of the pixel data from the memory in accordance with an enumerated value of the counter; and

a reset control unit for controlling resetting and non-resetting of the counter at a beginning of the unit.

18. The image processing apparatus as in claim 17, wherein one unit corresponds to the pixel data in one scanning line.

19. An image processing apparatus for providing thin-out processing with one unit which is composed with a specified number of pixel data to be inputted, comprising:

a memory for storing inputted pixel data;

a counter for counting a reference clock;

a clock thin-out circuit for generating a write clock by thinning out a read clock of pixel data to the memory in accordance with an enumerated value of the counter; and

a reset control unit for controlling resetting and non-resetting of the counter at a beginning of the unit.

20. The image processing apparatus as in claim 19, wherein one unit corresponds to the pixel data in one scanning line.